

REMARKS / ARGUMENTS

Reconsideration of the above-identified application respectfully requested. The amendments to the claims correct an inadvertent use of "composition", rather than "method". No new matter is added by virtue of these claim amendments. Moreover, such claim amendments are ministerial in nature as they relate to inadvertent errors. Accordingly, Applicants assert that no claims have been narrowed with the meaning of *Festo* (*Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 US 722, 112 S.Ct. 1831, 152 L.Ed.2d 944, 62 USPQ2d 1705 (2002)). See also *Interactive Pictures Corp. v. Infinite Pictures Inc.*, 274 F.3d 1371, 61 USPQ 1152 (Fed. Cir. 2001) (addition of the words "transform calculation" was not a narrowing amendment because that addition did nothing more than make explicit what had been implicit in the claim as originally worded).

The Restriction Requirement and Species Election

Applicants confirm their provisional election to initially prosecute the Group I claims 1-35 and have indicated claims 36-67 as being withdrawn from prosecution.

Applicants also confirm their provisional election of the following species: polyurethanes and permethrin. Applicants are in agreement with the Examiner that claims 1-35 read on these species.

The Obviousness Type Double Patenting Rejection

Claims 1, 2, 4-17, 19, and 23 stand provisionally rejected on the ground of non-statutory obviousness-type double patenting over claims 1-20 of Applicants' copending Application serial number 10/816,095. Although Applicants are in disagreement with the Examiner on this ground of rejection, in order to materially advance prosecution of this application, Applicants and the undersigned represent that upon an allowance of the claims, a terminal disclaimer complying with Rule 321 will be filed to overcome this ground of rejection.

The Art Rejections

Claims 1-35 stand rejected under the provisions of 35 U.S.C. § 103(a) as being unpatentable over Kodama (U.S. Patent No. 5,747,510) and Van Voris (U.S. Patent No. 5,801,194) in view of Knudson (U.S. Patent No. 4,849,006) and Hackh's (Hackh's Chemical Dictionary, p. 168, 1969).

Claims 1, 3, 18, 20, 23, 25, 26, 29-32, and 35 stand rejected under the provisions of 35 U.S.C. § 102(b) by or, in the alternative, under 35 U.S.C. § 103(a) as obvious, over Dittmar (U.S. Patent No. 4,066,777).

Applicants traverse the rejections of the claim and the grounds therefor.

The Kodama Citation

The Kodama patent (5,747,519) is a soil treatment patent. The present invention is not a soil treatment invention; but, rather, the invention pertains to materials that do not release significant amounts of pest control agent into the soil environment. Because of this feature, the products have increased longevity, stability, reduced environmental effects, and lower cost. The statements in col. 1, lines 37-47, pertain to the objects of the invention, not the summary or details of the invention. These statements merely endorse soil treatment and no more.

Kodama, at col. 4, lines 5-9, lists some materials that are to be used as "fixing agents, dispersing agents, thickening agents, and bonding agents". Significantly, these materials are not conventional "polymers" and are distinctly different from the polymers disclosed in the present application, because the two procedures use materials for different functions. Kodama uses his materials to stick his pesticide to soil particles (*i.e.*, to fix the pesticide to the soil, see, *Hackh's Chemical Dictionary*, p. 269, definition of "fixed", 1969 edition), whereas Applicants use their polymers to make physical barriers and to adhere particles to the barrier material. Kodama's barrier is a layer of treated soil. Applicants "associate" their composition with a structure to be protected, *viz.*:

The inventive composition forms a continuous or discontinuous layer thereof associated with the substrate to be protected. Preferably, then, the inventive composition is "film-forming" in that it forms a film, which preferably is continuous, recognizing that discontinuous films may provide adequate protection against certain pest species under certain circumstances. The inventive coating composition also can contain adhesive ingredients (*e.g.*, low Tg resins, tackifiers, *etc.*) that render it a conventional "adhesive" in order to adhere well to certain structures and to even join two structural surfaces together. Moreover, by careful formulation, the inventive composition may exhibit the thixotropy and adhesive characteristics to render it a caulk or sealant and, thus, protect cracks in structures. Thus, the term "composition" is to be construed broadly for present purposes in that the inventive pest species barrier composition may perform as a coating on the structure to be protected even if it conventionally also may be termed an adhesive, caulk, sealant, or other designation.

Application @ p. 6, ll. 3-15 (emphasis supplied).

In no sense of the term "composition", as defined by Applicants, e.g., a coating, can Kodoma's materials (col. 4, ll. 5-9) be read to teach Applicants' compositions. Thus, Kodoma fails to teach Applicant' use of a polymer system to form their "composition" and fails to "associate" the composition with a structure, as such terms are defined in the present application and the claims under examination (see, *Phillips v. AWH Corporation*, __ F.3d __, 75 U.S.P.Q.2d 1321, Fed. Cir. 2005).

The Van Voris Citation

Van Voris proposes a controlled release device formed from (a) a low volatility insecticide mixed with a high or medium density polymer and (b) a higher volatility insecticide mixed with a polymer having a low density. Use of carbon black to form "a friable mixture of carbon black and insecticide" (see, for example, claim 2) also is proposed. Applicants' found the release rate of Van Voris to be too rapid for their purposes. Lacking in Van Voris is the use of colloidal clay and associating the composition with a structure. Many of Applicants' polymers would be unsuitable for Van Voris in view of the requirement to use a mixture of different density polymers.

The Knudson Citation

Knudson proposes to contact organoclay aggregates with a pesticide (Fig. 1, col. 4, ll. 31, *et seq.*). The pesticide-swollen organoclay, then, is dried and released to the environment. Col. 5, lines 47-60, indicate that Knudson wants the bare product with no other protectants, release rate modulators, *etc.*, included. In terms of the claims under examination, Knudson distinctly teaches away from the use of "a polymer component" [claim 1, element (a)(i)].

While at first blush it would appear that Knudson proposes the use of the same clay material as claimed by Applicant's, this is distinctly not the case. Fig. 1 of Knudson and the text of the examples show that Knudson's sorption procedure does not include the key exfoliation step required for the longevity attainable with the Applicants' procedure. Knudson specifically refers to Beall, U.S. Patent No. 4,549,966, which does not reveal exfoliation. Thus, Knudson's active/organoclay has a different chemical structure from the Applicants' active/organoclay. Knudson refers to his product as an aggregate (see, Fig. 1). Applicants start with the aggregate and convert it to the exfoliated form (see, for example, the present application at p. 8, l. 22 bridging p. 9, l. 7).

Thus, Knudson fails to show use of Applicants' "polymer component" and fails to use an "exfoliated colloidal clay", as recited in the claims (see, *Phillips v. AWH Corporation*, *ibid.*).

The Dittmar Citation

Dittmar proposes a new composition effective as a miticide or as a fungicide. The compound is touted as being capable of being incorporated into just about any known composition or formulation used in or in connection with just about any living or non-living item in need of protection against mites or fungus. Dittmar's composition is shown dispersed in solvent, in water, in paints, *etc.* for use systemically, topically, *etc.* Most of the formulations shown by Dittmar have short life spans. In fact, life span and release rate of Dittmar's composition is not a high priority of Dittmar.

In column 15, cited by the Examiner as showing wood, fiberboard, and plants, such substrates are coated with Dittmar's new composition. However, no mention of retarding the release of the active agent is mentioned and certainly not the use of colloidal clays for such formulations. There are so many uses of Dittmar's composition that it is tempting to import one area into another area. Such temptation, however, needs to be resisted. In point of fact, Dittmar's only new teaching is his new fungicide/miticide. Dittmar then goes to great lengths to propose its use in any and all conventional formulations for preventing fungus and mite infestations. Dittmar distinctly does not teach any new formulations for use with his new fungicide/miticide.

In the passages at columns 19 and 20 where "wetable powders" are discussed, there is no hint that such wettable powders are useful to treat wood, nor that they are useful in conventional paint formulations. In fact, such "wetable powders" are taught to be aqueous powder formulations where surfactants are used. As for clays, Dittmar expressly teaches the equivalence of clays with "sugar" (see col. 19, ll. 64-68). Sugar surely is not equivalent to nanoclays. Dittmar shows emulsifiers, dispersing agents, and like, which all are used for aqueous formulations (see col. 20, ll. 1-17). In fact, Dittmar's wettable powders are intended to be sold to consumers for the consumer to suspend in water and spray onto surfaces to be treated (see col. 20, ll. 18-21). Again, these aqueous formulations are not suitable for the present pest formulations considering the polymers that Applicants use. The concept of slow and sustained release is absent from Dittmar. The longevity of such aqueous powders is not expressed by Dittmar and is highly doubted by Applicants.

In the latex paint example at column 26, a standard latex house paint formulation is shown. No attempt to modify the latex paint is stated, but for Dittmar's new fungicide/miticide. In particular, Dittmar does not express any desire or need to use a clay mixture with his new fungicide/miticide for inclusion in the latex paint formulation. Slowing the release rate of his new fungicide/miticide is not expressed by Dittmar. For that matter, Dittmar's wettable powder is for

convenience in application, not for retarding the release rate of his new fungicide/miticide. That need is not expressed anywhere by Dittmar.

Dittmar clearly was cited based on the teachings of the present invention and not based on being a proffered solution to longevity (retarding release rate) of a barrier to protect structures from the infiltration of pests.

Hackh's

Even though the rejection of claims includes "Hackh's", Applicants cannot find this citation made of record, nor any mention of it in the text of the rejection. Since page 168 was supplied and the term "colloid" is defined thereat, Applicants assume that the Examiner relies on this definition in his claim rejections. Insofar as this citation supplies the definition of "colloid", Applicants have no disagreement. Applicants would only state that the colloidal clays or nanoclays of interest also are exfoliated and not merely are colloidal.

The Kodama/Van Voris/Knudson Rejection

The Examiner believes it obvious to make a long-term protection barrier according to Kodama and Van Voris, modified to optimize protection by utilizing a colloidal barrier of Knudson.

The shortcomings of this art combination include that Kodama does not show Applicants' "compositions" or "exfoliated colloidal clays" or the "association" of Applicants' "beads" with a structure (as such terms are defined in the present application; see, *Phillips v. AWH Corporation*, *ibid* also). Van Voris also fails to show Applicants' "exfoliated colloidal clays", but rather shows "friable" carbon black particles. Van Voris also does not disclose "polymers" where their purpose is to retard the release of pest control agent. Instead, Van Voris expressly teaches the large and quick initial release of pest control agent. Finally, Knudson also fails to teach Applicants' "compositions" or "exfoliated colloidal clays" or the "association" of Applicants' "beads" with a structure. This art combination, then teaches the use non-exfoliated colloidal clays using Kodama's fixing agents (or perhaps Van Voris' density defined polymers). Regardless, such combination fails to render obvious the claims under examination.

The Dittmar Rejection

As stated above, Dittmar's invention is a new composition of matter effective as a miticide or as a fungicide. Dittmar disperses such composition in a variety of conventional formulations. No single formulation in Dittmar includes a "a bead comprising exfoliated colloidal

clay and adsorbed pest control agent, which bead is dispersed in said polymer component" (as such terms are defined in the present application). Dittmar at no line of disclosure teaches the artisan to retard the rate of his new fungicide. Dittmar makes no effort to slow the release rate nor that retarding the release rate of his new fungicide is desirable. Dittmar, then, cannot show Applicants' method, which includes a composition specially designed to retard the release rate of the pest control agent and then associating such composition with a structure.

The Examiner intermixes different uses of Dittmar's fungicide in his rejection of the claims. That is, the Examiner combines a passage where a plant is being sprayed with a passage where a latex paint is formulated. The compositions and teachings in these passages are not automatically combinable, because entirely different formulations for different uses are being disclosed.

Dittmar does not teach the present invention and, thus, does not render unpatentable the present invention.

Conclusion

In view of the amendments and remarks submitted herewith, allowance of the claims and passage to issue of this application respectfully is requested.

Respectfully submitted,

Date: 14 March 2006


Jerry K. Mueller, Jr.
Reg. No. 27,576
MUELLER AND SMITH, L.P.A.
Mueller-Smith Building
7700 Rivers Edge Drive
Columbus, Ohio 43235-1355
Tel.: 614-436-0600
Fax: 614-436-0057
email: smueller@muellersmith.com

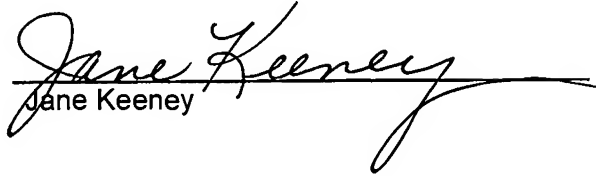
Appln. No. 10/698,722
Amendment dated March 14, 2006
Reply to Office Action of January 11, 2006



CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited on March 14, 2006, with the United States Postal Service as first class mail in an envelope addressed to:

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450


Jane Keeney